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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,489	10/17/2001	Hans Detampel	41220-10047	7469

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CHICAGO, IL 60611

EXAMINER
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PAHNG, JASON Y

ART UNIT	PAPER NUMBER
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3725

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/982,489	<b>Applicant(s)</b> DETAMPEL, HANS	
	<b>Examiner</b> Jason Y Pahng	<b>Art Unit</b> 3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on October 17, 2000. It is noted, however, that applicant has not filed a certified copy of the application as required by 35 U.S.C. 119(b).

### ***Specification***

The disclosure is objected to under 37 CFR 1.71, as being nonstatutory description. In the specification or drawings, there is no description of a device for optoelectronic monitoring and post-sorting means. The specification (page 12, line 15) discloses that the device separates the last remaining fiber contaminations. However, this is a mere invitation to invent. Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

### ***Claim Objections***

Claims 4, 6, 7, and 13 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-17, **as well as can be understood**, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which is not described in the specification.

Claim 1 calls for material to be transported to the freezing means following the multi-stage freeze system. However, the specification appears to disclose material to be transported to a reducer following the multi-stage freeze system.

With regard to claim 11, see the above objection to the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-18, **as well as can be understood**, are also rejected for failing to distinctly claim the subject matter because claims appear to contain a plurality of inventions. The claims, as well as can be understood, appear to contain a plurality of systems for processing material.

Claims 1-17 are replete with improper use of antecedent basis.

Claims 2-17, in general, are aggregative in nature. The claims are mere lists of elements without any cooperative relationships among claimed elements. The claims lack essential structural and functional details.

With regard to claims 2-17, the determination of the path of material is critical to the understanding of the invention, but the flow of the material is not described.

As an example, with regard to claim 1, line 5, the phrase, "the material connected in parallel," is not understood. It is not clear which element is connected to which element. Further, it is not clear which element is parallel to which element.

As an example, with regard to claim 1, line 5, "the material" has no antecedent basis because there is no previous positive recitation of a material.

As an example, with regard to claim 4, the phrase, "connected in parallel," is not understood. It is not clear which element is connected to which element. Further, it is not clear which element is parallel to which element.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 11, **as well as can be understood**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellers (US 5,524,838) in view of Bonnet (US 5,368,240). Ellers discloses substantially all of the claimed structure with the exception

Art Unit: 3725

adding a multi-stage freeze system prior to a freeze system. Adding more freezing systems to improve freezing is well known in the art. In a closely related art, Bonnet discloses a multi-stage freeze system where a pre-cooling tunnel is added prior to a main cooling tunnel in order to improve the cooling or freezing process. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Ellers with a multi-stage freeze system as taught by Bonnet in order to improve the freezing process.

With regard to claim 11, as well as can be understood, Ellers discloses a post-sorting means (33).

Claims 2-5, **as well as can be understood**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellers (US 5,524,838) in view of Bonnet (US 5,368,240) as applied above, further in view of Schorsch (US 4,084,387).

Claims 2 and 3 call for a temperature equalizing system. In a closely related art, Schorsch discloses a cryogenic crushing system with a temperature equalizing or controlling system (column 5, lines 58-61) in order to equalize the temperature of the material. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide the modified device of Ellers and Bonnet with a temperature equalizing system in order to equalize the temperatures of the material as taught by Schorsch.

With regard to claims 2 and 3, which also calls for a liquid refrigerant which may be sprayed onto the material, Schorsch discloses a liquid refrigerant which is sprayed

Art Unit: 3725

onto the material (column 4, lines 13-16) in order to improve the refrigerant coming into contact with the material.

With regard to claim 2 and 3, which calls for the pre-freeze tunnel and the main freeze tunnel to be horizontally parallel, it would be a matter of an obvious ordinary engineering to place the pre-freeze tunnel and the main freeze tunnel in any reasonable arrangement, including placing them horizontally parallel.

Claims 2 and 3 also calls for the temperature equalizing system to be located between the pre-freeze tunnel and the main freeze tunnel. Schorsch teaches that the temperature equalizing system may be located virtually anywhere (300, 301, 302, 303, 304, and 305). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide the modified device of Ellers and Bonnet to locate the temperature equalizing system in any reasonable location as taught by Schorsch, including that of locating them between the pre-freeze tunnel and the main freeze tunnel.

With regard to claim 3 and 4, which calls for additional multi-stage freeze systems, it would be a matter of an obvious ordinary engineering to add another freeze system or multi-stage freeze system in order to improve the freezing process, as taught by Bonnet as discussed in claim 1.

With regard to claim 5, which calls for the concept of recycling the refrigerant, Schorsch discloses drawing off a refrigerant and re-introducing the refrigerant.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schorsch (4,084,387) in view of Hayashi (US 5,431,347).

Claim 18 calls for a pre-reduction system and a multi-stage fine reducer. In a closely related art, Hayashi discloses a cryogenic crushing apparatus with a pre-reduction or pre-treatment system (3) in order to improve the cryogenic crushing process. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to provide Schorsch with a pre-reduction system in order to improve the cryogenic crushing process, as taught by Hayashi.

With regard to the use of a multi-stage fine reducer, Hayashi discloses that a single or dual crushing mechanism (7) are patentably equivalent.

### ***Conclusion***

The claims 6-10, and 12-17 are particularly more incomprehensible as to make any action on the merits impossible at this time because they depend on claim 4, which is already substantially incomprehensible.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Y Pahng whose telephone number is 571 272 4522. The examiner can normally be reached on 9:00 AM - 7:00 PM, Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allen Ostrager can be reached on 571 272 4521. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Art Unit: 3725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Mark Rosen". The signature is fluid and cursive, with a long horizontal stroke at the end.

JYP